

# Stuttgarter Beiträge zur Naturkunde

## Serie A (Biologie)

Herausgeber:

Staatliches Museum für Naturkunde, Rosenstein 1, D-7000 Stuttgart 1

Stuttgarter Beitr. Naturk.	Ser. A	Nr. 494	4 S.	Stuttgart, 30. 4. 1993
----------------------------	--------	---------	------	------------------------

### A New Species of the Genus *Bithia* Robineau-Desvoidy (Diptera: Tachinidae) from Tadjikistan and Kazakhstan

By Hans-Peter Tschorsnig, Stuttgart

With 4 figures

Summary

A new species, *Bithia gorbunovi* n. sp., from Tadjikistan and Kazakhstan is described.

Zusammenfassung

Eine neue Art, *Bithia gorbunovi* n. sp., aus Tadschikistan und Kasachstan wird beschrieben.

#### 1. Description of *Bithia gorbunovi* n. sp.

Holotype: ♂, Tadjikistan, Shachristan p-s, 5. VI. 1991, reared from *Bembecia zebo* Gorbunov & Spatenka (Lepidoptera, Sesiidae), leg. O. GORBUNOV.

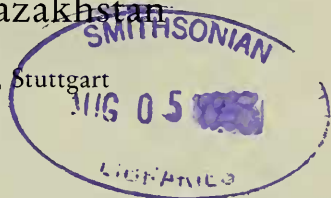
Paratypes: 3 ♂♂, 1 ♀, same data as holotype; – 1 ♀, Kazakhstan, Tjulkubas, 8. VI. 1991, reared from *Bembecia tshingana* Sheljuzhko (Lepidoptera, Sesiidae), leg. O. GORBUNOV.

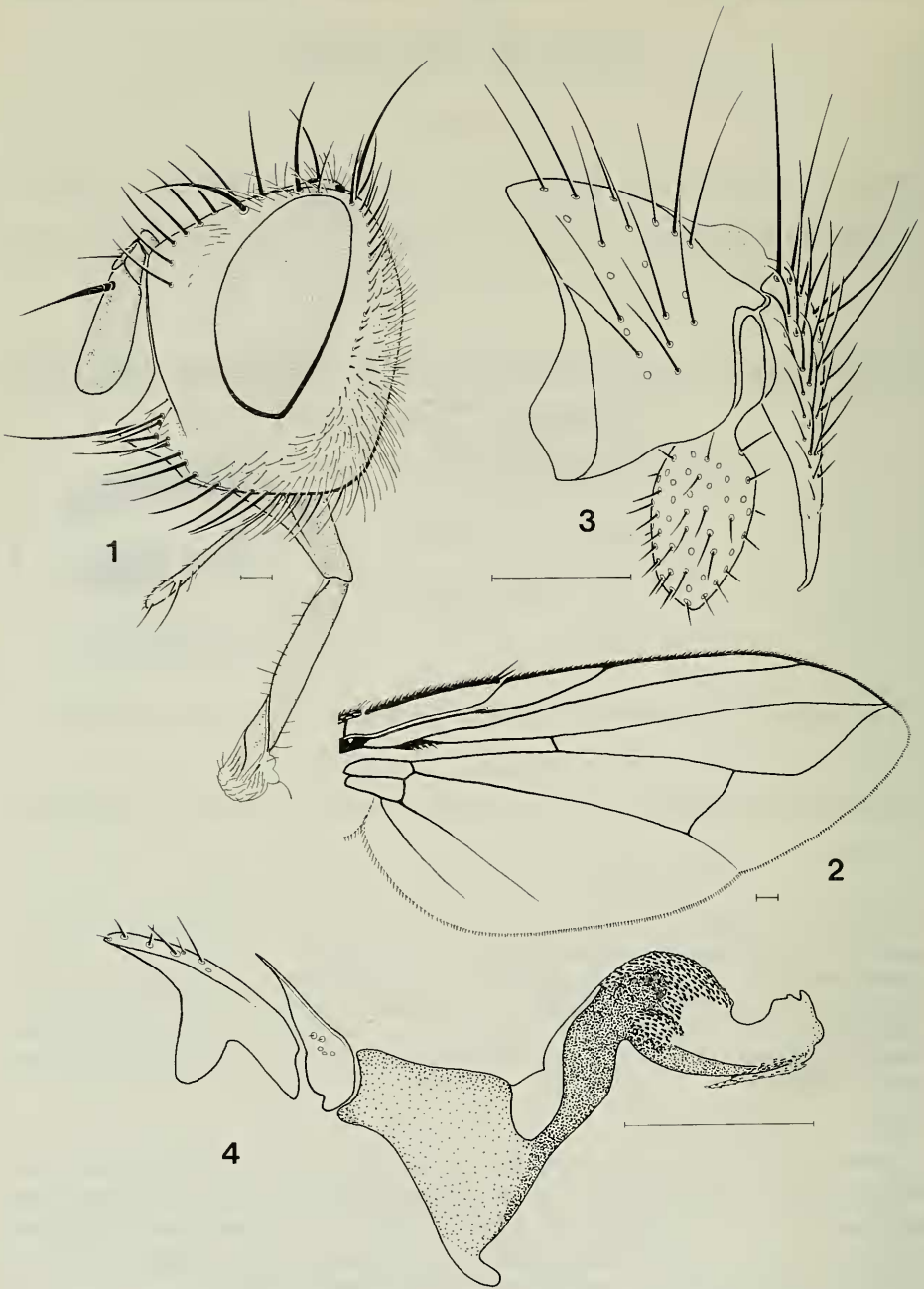
The holotype and 2 paratypes (1 ♂, 1 ♀) have been deposited in the Zoological Museum Moscow, 3 paratypes (2 ♂♂, 1 ♀) have been deposited in the Staatliches Museum für Naturkunde in Stuttgart.

Male:

Colour and pollinosity: Body (including palpi, antennae and legs) black. Tegula black, basicosta yellow. Interfrontal area, apical half of scutellum, and sides of tergites 2 and 3 red brown. Halteres dark brown. Whole body covered with dense grey pollinosity. Thorax with 4 narrow black stripes anterior to the suture. Abdomen dorsally with shifting spots, the posterior  $\frac{1}{5}$  of tergite 5 black.

Head (Fig. 1): Eyes bare. Frons at its narrowest point 1.15–1.40 times as wide as an eye in dorsal view. Interfrontal area at a midpoint 0.5–0.7 times as wide as a single parafrontal. Outer vertical setae 0.5–0.6 times as long as inner vertical setae. Ocellar setae proclinate. 1 proclinate orbital seta. The row of 7–9 frontal setae extends downwards to the level of the end of the second antennal segment. Parafrontals with fine hairs, reaching downwards to the level of the lowermost frontal seta. Parafacials





Figs. 1-4. *Bithia gorbunovi* n. sp., male. - 1. Head; - 2. right wing; - 3. epandrium, cerci and surstyli, lateral view; - 4. pregonite, postgonite and aedeagus, lateral view. - Scale: 0.2 mm.

bare, 1.0–1.2 times as wide as third antennal segment. Third antennal segment 2.7–3.1 times as long as second. Arista micropubescent, its basal  $\frac{1}{3}$  thickened, second segment approximately as long as wide. Gena approximately 0.3 times the height of the eye. Facial ridge with 3–4 setulae dorsal to the vibrissae. Sclerotized part of the haustellum 5 times as long as wide. Occiput with 1–2 rows of black setulae behind the postocular row.

Thorax: Prosternum and propleuron bare. 3 humeral setae in a straight line. 2+3 acrostichal setae, 3+3 dorsocentral setae, 0+3 intra-alar setae. 3 sternopleural setae, occasionally 4 (1 specimen). Scutellum with basal setae, strong subapical setae, strong erect crossing apical setae and 2 preapical setae.

Legs: Fore tibia with preapical anterodorsal seta 0.5 times as long as dorsal seta. Mid tibia with 3 anterodorsal setae. Hind tibia with 2 preapical dorsal setae (anterodorsal and dorsal), the posterodorsal one hair-like. Claws as long as the distal tarsal segment.

Wing (Fig. 2): Costal spine 1.0–1.4 times as long as r-m. First and second costal sector bare on the dorsal surface or first sector occasionally with 1–4 hairs. Basal node of  $r_{4+5}$  with 3–6 setulae. Cell  $R_5$  open. Bend of vein m obtuse and rounded. Sector of m between r-m and m-cu 2.5–3.0 times as long as sector between m-cu and the bend of m.

Abdomen: Tergite 1+2 excavate to its hind margin or nearly so. Tergite 1+2 with 2 lateral marginal setae; tergite 3 with 1 pair of discal setae, 1 pair of median marginal setae and 2–3 lateral marginal setae; tergite 4 with 1 pair of discal setae and a row of marginal setae; tergite 5 with 1–2 irregular rows of discal setae and a row of marginal setae. Abdominal hairs recumbent dorsally, more or less erect laterally, occasionally mixed with some weak lateral discal setae on tergite 4.

Postabdomen: Tergite 6 band-like, bearing a row of setulae on its hind margin, free from segment 7+8. Sternite 6 asymmetrical (as in groundplan of Tachinidae), on its right side separated from segment 7+8 by a membranous suture. Hind margin of sternite 5 with the normal V-like incision. Cerci elongate, membranously fused in their basal  $\frac{9}{10}$ , apically with a very short hook (Fig. 3). Surstyli broad. Processus longi rod-like. Arms of hypandrium fused. Pregonites hook-like (Fig. 4). Postgonites slender (Fig. 4). Ejaculatory apodeme with a very short process. Aedeagus as in Fig. 4. Epiphallus small.

Body length: 7.0–8.5 mm.

Female, differing from male as follows:

Palpi and antennal segments 1 and 2 red brown. Frons at its narrowest point 1.65 times as wide as an eye in dorsal view. Outer vertical setae 0.7 times as long as inner vertical setae. 2 proclinate orbital setae. 1 prevertical seta. Third antennal segment 2.4–2.5 times as long as second. Parafacials 1.5 times as wide as third antennal segment. Mid tibia with 5 anterodorsal setae. Claws  $\frac{2}{3}$  the length of the distal tarsal segment. Cell  $R_5$  open or closed at wing margin.

Body length: 9.5–10.0 mm.

## 2. Features to distinguish the new species from related species

The new species resembles *Bithia sibirica* Richter 1980 in that the male frons is broad and has proclinate orbital setae, the tegulae, tibia and palpi are black, the scutellum has strong apical setae, the node of  $r_{4+5}$  has only few setulae and tergite 1+2 is

excavate to its hind margin. Only males are known of *B. sibirica*. The differences are as follows:

- 1 Frons with only 1 proclinate orbital seta, no prevertical seta. The hairs of the parafrontals extend downwards only to the level of the lowermost frontal seta (Fig. 1). Sector of vein m between r-m and m-cu 2.5–3.0 times as long as sector between m-cu and the bend of m (Fig. 2) . . . . . *B. gorbunovii* sp.
- Frons with 2 proclinate orbital setae and 1 prevertical seta. The hairs of the parafrontals extend downwards beyond the level of the lowermost frontal seta (Fig. 15 in RICHTER 1980). Sector of vein m between r-m and m-cu only twice as long as sector between m-cu and the bend of m (Fig. 16 in RICHTER 1980) . . . . . *B. sibirica* Richter.

### 3. Bibliography

RICHTER, V. A. (1980): Tachinidae (Diptera) of the Chita region. — Nascom. Mongol. 7: 518–552; Leningrad. [in Russian].

Author's address:

Dr. HANS-PETER TSCHORSNIG, Staatliches Museum für Naturkunde Stuttgart (Museum am Löwentor), Rosenstein 1, D-7000 Stuttgart 1.